



# CITY OF LODI

## COUNCIL COMMUNICATION

**AGENDA TITLE:** Adopt Resolution Authorizing the City Manager to Execute a Memorandum of Understanding between the City of Lodi and Various Railroads to Construct Track Improvements Allowing Abandonment of the Existing Lodi Avenue Railroad Tracks; and Adopt Resolution Authorizing the City Manager to Execute a Contract with Mark Thomas & Company (\$428,054) for Final Design Services and Authorizing the City Manager to Execute Measure K Cooperative Design and Construction Agreements; and Appropriate **\$7,269,000** for the Project  
**Revised and Supplemental Information**

**MEETING DATE:** September 18, 2002

**PREPARED BY:** Public Works Director

**RECOMMENDED ACTION:** No change except for appropriations as shown below.

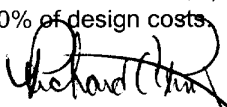
**BACKGROUND INFORMATION:** Since the Council Communication was prepared last week, staff and the railroads have continued to refine the MOU. A faxed copy of the final document is attached, and there are only minor changes in wording. In addition, we have faxed signatures from the Central California Traction and Union Pacific Railroads and a message that the Burlington Northern & Santa Fe Railroad's signature is coming. The copy of the MOU is notated with the latest changes.

The project funding shown in the Council Communication is corrected and clarified as shown below:

The actual amount of the Measure K Grant is \$6,694,000, which for discussion purposes had been rounded to \$6,700,000. The MOU contains the correct amount, and we should use the correct amount in the actual appropriation. The following table shows the total project costs and funding sources:

Project Component	Project Costs	Funding Sources:	
		Measure K Grant	Local (Streets IMF)
Preliminary Design	\$240,000	\$180,000*	\$60,000*
Final Design, Acquisition	\$575,000	\$227,500	\$347,500
Construction	<u>\$6,694,000</u>	<u>\$6,286,500</u>	<u>\$407,500</u>
Total:	\$7,509,000	\$6,694,000	\$815,000
	New Appropriations:	\$6,514,000	\$755,000

\* Already appropriated; Measure K Grant will fund 50% of design costs.

  
 Richard C. Prima, Jr.  
 Public Works Director

RCP/pmf  
 Attachment

cc: Randy Hays, City Attorney  
 F. Wally Sandelin, City Engineer  
 Charles Swimley, Senior Civil Engineer  
 Sharon Welch, Senior Civil Engineer

Joel Harris, Purchasing Officer  
 Wes Fujitani, Senior Civil Engineer  
 Paula Fernandez, Senior Traffic Engineer

**APPROVED:** \_\_\_\_\_  
 H. Dixon Flynn -- City Manager

## MEMORANDUM OF UNDERSTANDING

### City of Lodi, California

### Removal of Tracks From Lodi Avenue

THIS MEMORANDUM OF UNDERSTANDING IS ENTERED INTO THIS 18<sup>th</sup> DAY OF September, 2002 by and among the City of Lodi, a municipal corporation of the State of California, (hereinafter referred to as "City") the Central California Traction Company ("CCT"), a California corporation owned jointly by The Burlington Northern and Santa Fe Railway Company ("BNSF") and the Union Pacific Railroad Company ("UP"), both UP and BNSF being Delaware corporations, (CCT, UP and BNSF hereinafter referred to collectively as "Railroads").

date  
added

WHEREAS, City desires to remove the rail tracks owned and operated by the CCT from the center of Lodi Avenue between the connection to UP's Fresno Subdivision near Main St. and the east line of Beckman Road within the City of Lodi; and

WHEREAS, removal of the CCT rail tracks in Lodi Avenue involves reconstruction of the UP rail tracks and right of way between the crossing of the CCT main line near Brandywine station, (MP 105.2) and UP's Fresno Subdivision main line in Lodi, generally along Lockeford Street and State Highway 12 and also known as the former Southern Pacific Kentucky House Branch ("KHB") or providing a suitable alternative; and

WHEREAS, CCT and its owners, UP and BNSF, are agreeable to the removal of CCT's rail tracks located in Lodi Avenue in return for the City's agreement to fund a sufficient capacity plan to accommodate rail operations per this MOU.

NOW, THEREFORE, it is mutually agreed and understood by and between the City and Railroads:

1. City and Railroads have generally agreed on a conceptual replacement plan as shown on Exhibit A ("Rail Plan") attached hereto and by this reference made a part hereof. Within six (6) months following execution of this Memorandum, City shall, at no cost to Railroad, prepare engineered plans and specifications for construction of the Rail Plan, which shall be used by Railroads to obtain competitive bids for construction of the project. Railroads shall have the right, collectively, to review and approve the plans and specifications during preparation thereof, which process shall not be unreasonably delayed by Railroads. Railroads shall not be required to construct any portion of the Rail Plan that they have not previously approved through this process.

2. Railroads agree that upon execution of this Memorandum by all parties, the City shall enter into a contract for design and preparation of bidding specifications for Rail Plan. Upon execution of said contract by City and the selected design contractor, but after approval by the Surface Transportation Board of CCT's abandonment of the tracks in Lodi Avenue, City shall have the right to remove and/or pave over the tracks, ties, other track material and all appurtenant track fixtures owned by CCT in Lodi Avenue, as shown in the Rail Plan. Upon execution of this Memorandum by City and Railroads, CCT shall, as quickly as possible, take all action necessary at its sole cost and expense to obtain authority as needed to abandon and retire in place the said

added

railroad facilities in Lodi Avenue, in accordance with the Rail Plan. Thereafter, neither CCT individually nor the Railroads collectively or singly shall have any responsibility or duty to remove, dispose of, and/or pave over any CCT rail tracks or other facilities in Lodi Avenue, notwithstanding any franchise or ordinance requirements, if any, to the contrary. If City removes, disposes of, and/or paves over any CCT rail tracks or facilities in Lodi Avenue prior to attainment by CCT of all necessary regulatory authority, then City shall do so at its own risk and agrees to hold Railroads harmless from any cost, expense or fine incurred by the Railroads that is in any way related to such action by the City. added -  
moved  
from  
Sec. 12

3. City agrees that Rail Plan design costs and the removal and appropriate disposal of rail ties and soil, and/or paving over of CCT's rail tracks and other facilities located in Lodi Avenue referred to in Section 2, shall be undertaken by City at City's sole cost and expense and such cost shall not be included in the Project Cost for the Rail Plan, nor shall Railroads have any liability whatsoever for the cost of such work or any liability, present or future, for the condition of the property. added

4. CCT and UP shall provide, at no cost to the City, any real property owned by either of them that is necessary for track reconstruction or improvements to complete the Rail Plan. Excess CCT or UP right-of-way not necessary for the Rail Plan, or for any other railroad purpose, shall be made available to City as shown on the Rail Plan. This consists of strips of Railroad right-of-way for street purposes as shown in the Rail Plan which will be dedicated to City at no cost, as well as other parcels as identified in the Rail Plan which will be offered for sale to the City at fair market value.

5. City shall acquire in fee the real property necessary for the connection between the CCT main line and the east end of the reconstructed KHB near Brandywine Station along State Highway 12, meeting the specifications as shown in the approved Rail Plan. Said real property shall be conveyed by City to CCT at no cost to the Railroads, and the cost to acquire said real property in fee by City shall not be included in the Project Cost.

6. Railroads agree to obtain all required federal and California Public Utilities Commission regulatory approvals and to construct, or have constructed the Rail Plan as per the final plans and specifications for the Rail Plan. City shall use its best efforts to assist Railroads with obtaining such permits and approvals. City, through the San Joaquin Council of Governments, has obtained \$6,694,000 in Measure K funds for this project and will appropriate the additional funds necessary for design and land acquisition as necessary to implement this Memorandum of Understanding. Railroad will begin construction upon final approval, which shall not be unreasonably delayed, of construction contracts by City. Upon execution of construction contract(s) by Railroads, City shall advance ten percent (10%) of the contract amount to Railroads, and then pay upon invoice by Railroads for construction work, up to the maximum amount of the City's contribution toward Project Costs as set forth in Section 9. In the event the City makes payments later than thirty (30) days after invoice, the City agrees to pay the Railroads interest on the unpaid invoice balance at a rate of 1% per month. added

7. Railroads may designate alternate improvements, meeting the goals of this project, but at a minimum, shall make the necessary improvements to:

- a) abandon the Lodi Ave. tracks west of the east Right-of-Way of Beckman Rd.;

conveyed

- b) provide service to Lodi industries comparable to the existing service;
- c) provide an at-grade pedestrian crossing on the KHB at Central Ave, and;
- d) provide street right of way and property per Section 4.

8. If necessary to accomplish the goals of the Rail Plan, UP agrees to lease to CCT property it has available that is necessary to maintain efficient rail service to Lodi. This includes the KHB and property for the interchange tracks to be located along the Fresno Subdivision as depicted on the Rail Plan.

9. The City agrees to contribute not more than \$6,694,000 toward the "Project Cost" of the Rail Plan. City and Railroads agree the cost of the Rail Plan, along with unforeseen expenditures, shall collectively be referred to as "Project Costs". Deviations from approved plans do not constitute unforeseen expenditures as provided for herein. The party or parties requesting deviations (change orders) from the approved plans shall bear the cost of such changes, except that designated alternate improvements per Section 7 shall be considered Project Costs.

10. City and Railroads agree that all contractors hired by Railroads to complete the Rail Plan, shall be required to provide normal and customary insurance naming City and Railroads as additional insured. Railroads shall abide by all applicable wage laws in the construction of the Rail Plan.

11. Railroads shall give appropriate notice to their tenants to remove and/or relocate tenant facilities that are within areas of construction of the Rail Plan and said relocations shall be at no expense to City.

moved from

[Signatures on Following Page]

**Accepted For:**  
**City of Lodi, a municipal corporation**

\_\_\_\_\_  
(Signature)

Name: H. Dixon Flynn

Title: City Manager

Approved as to Form:

\_\_\_\_\_  
Randall A. Hays, City Attorney

Attest:

\_\_\_\_\_  
Susan J. Blackston, City Clerk

**Accepted For:**  
**Union Pacific Railroad Company**

\_\_\_\_\_  
(Signature)

Name: Dennis J. Duffy

Title: Executive Vice President Operations

**Accepted For:**  
**Central California Traction Company**

\_\_\_\_\_  
(Signature)

Name: Jeff L. Verhaal

Title: President

**Accepted For:**  
**The Burlington Northern and  
Santa Fe Railway Company**

\_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_



# CITY OF LODI

## COUNCIL COMMUNICATION

**AGENDA TITLE:** Adopt Resolution Authorizing the City Manager to Execute a Memorandum of Understanding between the City of Lodi and Various Railroads to Construct Track Improvements Allowing Abandonment of the Existing Lodi Avenue Railroad Tracks; and Adopt Resolution Authorizing the City Manager to Execute a Contract with Mark Thomas & Company (\$428,054) for Final Design Services; and Adopt Resolution Authorizing the City Manager to Execute Measure K Cooperative Design and Construction Agreements; and Appropriate \$7,275,000 for the Project

**MEETING DATE:** September 18, 2002

**PREPARED BY:** Public Works Director

**RECOMMENDED ACTION:** Adopt a resolution authorizing the City Manager to execute a Memorandum of Understanding (Exhibit A) between the City of Lodi and Union Pacific Railroad Company (UPRR), Burlington Northern and Santa Fe Railway Company (BNSF), and Central California Traction Company (CCT) to construct railroad track improvements to facilitate the abandonment of the existing Lodi Avenue railroad tracks as part of the Lodi Central City Railroad Safety Improvement Project; and adopt a resolution authorizing the City Manager to execute a Professional Services Agreement (Exhibit B) with Mark Thomas & Company in the amount of \$428,054 for final design services associated with the Rail Plan (Exhibits A1-A8); and adopt a resolution authorizing the City Manager to execute Measure K Cooperative Design and Construction agreements for the Project; and appropriate \$575,000 to fund the final design contract and property acquisition costs, and \$6,700,000 for the construction of the Rail Plan for a total appropriation of \$7,275,000.

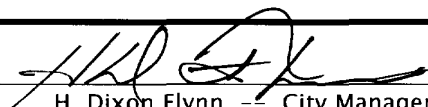
**BACKGROUND INFORMATION:** On December 19, 2001, Council authorized the City Manager to execute a professional services agreement with Mark Thomas & Company, Inc., for preliminary design services associated with the Lodi Central City Railroad Safety Improvement Project. This Council action included an appropriation of \$240,000. Of this amount, \$180,000 was funded by Measure K grant monies.

Over the past several months, the City and UPRR, BNSF, and CCT have been using information generated in the preliminary design phase to jointly prepare a Memorandum of Understanding (MOU). The MOU includes the terms and conditions of the proposed project that will facilitate the abandonment of the railroad in Lodi Avenue. The plan to accomplish this goal includes construction of a switchyard along the UPRR mainline north of Lockeford Street, the reactivation of the Kentucky House Branch that runs parallel to Lockeford Street from the UPRR mainline to the CCT tracks east of town, and other track improvements as shown in Exhibits A1-A8.

Upon execution of the MOU, the City intends to temporarily pave over the track in Lodi Avenue and begin the final design of plans and specifications for the Rail Plan. Environmental compliance, bidding and construction management of the Rail Plan is to be performed by the railroads.

In accordance with the proposed MOU, the City will finance construction of the Rail Plan up to \$6,700,000; since \$180,000 of Measure K Grant funds have been previously committed to the project for the preliminary design tasks, \$6,520,000 from Measure K grant funds are reserved by the San Joaquin Council of Governments (SJCOG). The remaining \$180,000 is to be financed using Street funds. The final design of the Rail Plan is also

APPROVED: \_\_\_\_\_

  
H. Dixon Flynn -- City Manager

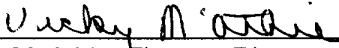
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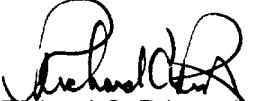
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Adopt Resolution Authorizing the City Manager to Execute a Memorandum of Understanding between the City of Lodi and Various Railroads to Construct Track Improvements Allowing Abandonment of the Existing Lodi Avenue Railroad Tracks; and Adopt Resolution Authorizing the City Manager to Execute a Contract with Mark Thomas & Company (\$428,054) for Final Design Services; and Adopt Resolution Authorizing the City Manager to Execute Measure K Cooperative Design and Construction Agreements; and Appropriate \$7,275,000 for the Project  
September 18, 2002  
Page 2

to be financed by the City using Street funds and will be performed in accordance with the proposed scope of work reflected in Exhibit B. The fee estimate for the final design is \$428,054; an appropriation of \$515,000 is requested to fund this task. The additional appropriation for final design services is recommended to cover contract contingencies associated with large, complex projects and any property acquisition that may be necessary.

Staff recommends Council adopt a resolution authorizing the City Manager to execute the MOU between the City and the railroads, and adopt resolutions authorizing the City Manager to execute the final design contact, and Measure K Cooperative Design and Construction agreements for the Project.

FUNDING:	Requested Appropriation:	Measure K Grant Funds	\$6,520,000 (\$180,000 previously committed)
		Street Fund	\$ 755,000
	Budgeted:	2001-2003, Capital Improvement Budget Page E-43	
	Funding Available:	 Vicky McAthie, Finance Director	

  
Richard C. Prima, Jr.  
Public Works Director

Prepared by Charlie Swimley, Senior Civil Engineer  
RCP/CES/lm

Attachments

cc: Randy Hays, City Attorney  
Joel Harris, Purchasing Officer  
Wes Fujitani, Senior Civil Engineer  
F. Wally Sandelin, City Engineer  
Paula Fernandez, Senior Traffic Engineer  
Sharon Welch, Senior Civil Engineer

**MEMORANDUM OF UNDERSTANDING**  
**City of Lodi, California**  
**Removal of Tracks From Lodi Avenue**

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WHEREAS, City desires to remove the rail tracks owned and operated by the CCT from the center of Lodi Avenue between the connection to UP's Fresno Subdivision near Main St. and the east line of Beckman Road within the City of Lodi; and

WHEREAS, removal of the CCT rail tracks in Lodi Avenue involves reconstruction of the UP rail tracks and right of way between the crossing of the CCT main line near Brandywine station, MP 105.2) and UP's Fresno Subdivision main line in Lodi, generally along Lockeford Street and State Highway 12 and also known as the former Southern Pacific Kentucky House Branch ("KHB") or providing a suitable alternative; and

WHEREAS, CCT and its owners, UP and BNSF, are agreeable to the removal of CCT's rail tracks located in Lodi Avenue in return for the City's agreement to fund a sufficient capacity plan to accommodate rail operations per this MOU.

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shall have the right to remove and/or pave over the tracks, ties, other track material and all appurtenant track fixtures owned by CCT in Lodi Avenue, as shown in the Rail Plan. Upon execution of this Memorandum by City and Railroads, CCT shall take all action necessary at its sole cost and expense to obtain authority as needed to abandon and retire in place the said railroad facilities in Lodi Avenue, accordance with the Rail Plan. Thereafter, neither CCT individually or the Railroads collectively or singly shall have any responsibility or duty to remove and/or pave over any CCT rail tracks or other facilities in Lodi Avenue, notwithstanding any franchise or ordinance requirements, if any, to the contrary.

3. City agrees that Rail Plan design costs and the removal and/or paving over of CCT's rail tracks and other facilities located in Lodi Avenue referred to in Section 2, shall be undertaken by City at City's sole cost and expense and such cost shall not be included in the Project Cost for the Rail Plan, nor shall Railroads ~~or CCT~~ have any liability whatsoever for the cost of such work.

4. CCT and UP shall provide, at no cost to the City, any real property owned by either of them that is necessary for track reconstruction or improvements to complete the Rail Plan. Excess CCT or UP right-of-way not necessary for the Rail Plan, or for any other railroad purpose, shall be made available to City as shown on the Rail Plan. This consists of strips of Railroad right-of-way for street purposes as shown in the Rail Plan which will be dedicated to City at no cost, as well as other parcels as identified in the Rail Plan which will be offered for sale to the City at fair market value.

5. City shall acquire in fee the real property necessary for the connection between the CCT main line and the east end of the reconstructed KHB near Brandywine Station along State Highway 12, meeting the specifications as shown in the approved Rail Plan. Said real property shall be conveyed by City to CCT at no cost to ~~UP, CCT or~~ the Railroads, and the cost to acquire said real property in fee by City shall not be included in the Project Cost.

6. Railroads agree to obtain all required federal and California Public Utilities Commission regulatory approvals and to construct, or have constructed the Rail Plan as per the final plans and specifications for the Rail Plan. City shall use its best efforts to assist Railroads with obtaining such permits and approvals. City, through the San Joaquin Council of Governments, has obtained \$6.7 million in Measure K funds for this project and will appropriate the additional funds necessary for design and land acquisition as necessary to implement this Memorandum of Understanding. Railroad will begin construction upon final approval of construction contracts by City. Upon execution of construction contract(s) by Railroads, City shall advance ten percent (10%) of the contract amount to Railroads, and then pay upon invoice by Railroads for construction work, up to the maximum amount of the City's contribution toward Project Costs as set forth in Section 9. In the event that the City makes payments later than thirty (30) days after invoice, the City agrees to pay the Railroads interest on the unpaid balance at a rate of 1% per month.

7. Railroads may designate alternate improvements, meeting the goals of this project, but at a minimum, shall make the necessary improvements to:

- a) abandon the Lodi Ave. tracks east of the east Right-of-Way of Beckman Rd.;
- b) provide service to Lodi industries comparable to the existing service;
- c) provide an at-grade pedestrian crossing on the KHB at Central Ave, and;
- d) provide street right of way and property per Section 4.

8. If necessary to accomplish the goals of the Rail Plan, UP agrees to lease to CCT property it has available that is necessary to maintain efficient rail service to Lodi. This includes the KHB and property for the interchange tracks to be located along the Fresno Subdivision as depicted on the Rail Plan.

9. The City agrees to contribute not more than \$6,700,000.00 toward the "Project Cost" of the Rail Plan. City and Railroads agree the cost of the Rail Plan, along with unforeseen expenditures, shall collectively be referred to as "Project Costs". Deviations from approved plans do not constitute unforeseen expenditures as provided for herein. The party or parties requesting deviations (change orders) from the approved plans shall bear the cost of such changes, except that designated alternate improvements per Section 7 shall be considered Project Costs.

10. City and Railroads agree that all contractors hired by Railroads to complete the Rail Plan, shall be required to provide normal and customary insurance naming City and Railroads as additional insured. Railroads shall abide by all applicable wage laws in the construction of the Rail Plan.

11. Railroads shall give appropriate notice to their tenants to remove and/or relocate, at no expense to City, tenant facilities that are within areas of construction of the Rail Plan.

12. If City removes and/or paves over any CCT rail tracks or facilities in Lodi Avenue prior to attainment by CCT of all necessary regulatory authority as provided for in Section 2 of this MOU, then City shall do so at its own risk and agrees to hold Railroads harmless from any cost, expense or fine incurred by the Railroads that is in any way related to such action by the City.

[Signatures on Following Page]

**Accepted For:**  
**City of Lodi, a municipal corporation**

\_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Accepted For:**  
**Union Pacific Railroad Company**

\_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Accepted For:**  
**Central California Traction Company**

\_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Accepted For:**  
**The Burlington Northern and  
Santa Fe Railway Company**

\_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

# Outline Specifications for Railroad Track Construction

## Central City Railroad Safety Improvement Project

Rail – relay, Class 1, 112 lb. per yard or heavier, manufactured by the control-cooled process. 133 lb. or 136 lb. Class 1 rail will be required at the UP connections. The rail connections will be welded at the street crossings and on the Kentucky House Branch between Stockton Street and Cherokee Lane.

### Crossties:

- Wood – new, treated hardwood ties, 7" x 9" x 8'-0", conforming to the standards of the Union Pacific Railroad.
- Concrete – new, conforming to the standards of the Union Pacific Railroad. Concrete ties will be used at curved track at the connection from the track on Lockeford Avenue to the new interchange yard.

Switch ties – new, treated hardwood ties, 7" x 9" x specified lengths, conforming to the standards of the Union Pacific Railroad.

### Trim:

- Bolts and spikes – new, conforming to the standards of the Union Pacific
- Tie plates, angle bars and anti-creepers – relay, Class 2 or better

Ballast – crushed rock conforming to Union Pacific specifications for Class 1 or 2.

Subballast – crushed rock conforming to Caltrans Class 2 Aggregate Base

### Turnouts:

- Main track – all new materials, rail weight matching adjacent main track rail, conforming to the standards of the Union Pacific Railroad.
- Yard tracks – relay, Class 1, 112 lb. per yard or heavier, manufactured by the control-cooled process. 133 lb. or 136 lb. Class 1 rail will be required at the UP connections.

### Crossing Protection:

Location	Protection Type
Lockeford / UP Mainline	Modify detection on mainline use existing crossing gates and flashers.
Main Street	New protection per PUC requirements.
Lockeford Avenue	New protection per PUC requirements.
Stockton Street	Replace previous PUC approved crossing protection.
Washington Street	Replace previous PUC approved crossing protection.
Calaveras Pedestrian Crossing (New)	New protection per PUC Requirements.
Cherokee Lane	Revisions to existing protection per PUC requirements.
Cluff Avenue	Replace previous PUC approved crossing protection.
Guild Avenue	New protection per PUC requirements.
Private Crossing (Near Rte 12/CCT Mainline)	New protection per PUC Requirements.
Beckman Road	Existing crossing to be removed.

**SHEET A1**



## RAIL PLAN KEY MAP

**SHEET A2**

*lut*

**Carl Rodolf & Associates, Inc.**  
Civil Engineering  
Railroad Design and Consultation



**(Re: Central City Railroad Project issue)**

**NOTE:**

**This item contained five (5) large-scale, very long maps that could not be reduced into the electronic records management system. The original (hard copy) maps will be retained in the City Clerk's Office for two years following the date of this meeting. In addition, Public Works will retain the information for two years following the completion date of this project.**

**Mark Thomas & Co., Inc.**  
**Scope of Work For**  
**Central City Railroad Safety Improvement Project**  
**Phase 3**  
**(Railroad PS&E)**

**Project Understanding:**

The City of Lodi, Mark Thomas & Co. Inc. (MTCO), and Carl Rodolf and Associates (CRA) have been working with Union Pacific Railroad (UPRR), Burlington Northern Santa Fe (BNSF) and Central California Traction (CCT) railroad to prepare a Memorandum of Understanding (MOU) to remove the CCT railroad tracks on Lodi Avenue from the UPRR mainline to east of Beckman Road. Before approving the MOU, UPRR requested that project plans for the construction of the railroad improvements be prepared and official bids be gathered. The lowest, qualified bid would be used as the cost of the improvements to be entered in the MOU.

The City of Lodi has requested that Mark Thomas & Co, Inc. (MTCO) prepare a scope and fee for anticipated work required to design improvements to the UPRR and CCT railroad tracks. This portion of work is the third phase of the overall project. The first two phases included preparing exhibits for the discussions with UPRR, Burlington Northern Santa Fe (BNSF) and the CCT (Phase 1) and preliminary railroad and right of way engineering (Phase 2). The project plans will be administered (advertised and awarded) by CCT.

**Project Improvements:**

The plans, specifications and estimates for construction would generally include the following:

- Construct a new four-track interchange yard on the east side of the UPRR mainline between Lockeford Street and Turner Road (3000 ft).
- Rehabilitate the Kentucky House Branch (KHB) from the UPRR mainline to the CCT mainline (8,100 ft).
- Extend the existing track at the Franklin run-around track on the CCT mainline, north of Victor Road (1600 ft).
- Reconfigure the Lodi Avenue interchange yard between Guild Avenue and Beckman Road and remove the existing tracks from Cherokee Lane to Beckman Road (3,700 ft).

Overlaying the existing CCT track on Lodi Avenue from the UP mainline to Cherokee Lane will be performed with a separate project. Design for the removal of the existing tracks from the UP mainline to the Cherokee Lane will be included with a follow-up project to reconstruct Lodi Avenue.

## **Project Team:**

For this phase of work, MTCO, managed by Rob Himes, will continue to work with Carl Rodolf Associates (CRA). Blackburn Consultants (BCI) will provide the geotechnical engineering services and Radman Aerial Surveys (RAS) will provide base mapping. Universal Field Services will provide right of way acquisition services. Fehr & Peers Associates (FPA) will provide signal design.

## **Separating Project Tasks:**

We are proposing that the work for this contract be performed in three main tasks. Task 1 will include collecting information, develop alternatives, perform calculations and prepare background mapping. Task 2 will include the preparation of the project plans, specifications and construction estimates. Task 3 will include construction support activities.

## **Assumptions:**

- The Railroads will prepare the environmental document.
- Privately owned utilities will be designed and relocated by the owner of the utilities.

## **Scope of Work:**

### **Task 1.00 Studies and Background Mapping**

#### **Task 1.01 Project Meetings/Project Management**

It is anticipated that the City, MTCO, CRA, UPRR, BNSF and CCT will meet to discuss the PS&E package. Preliminary meetings are included in previous work items. It is anticipated that the plan submittals would include 60%, 90% and 100%. One meeting per submittal is anticipated.

<u>Meeting</u>	<u>Number of Meetings</u>
- 60% Review	2 (City and RxR)
- 90% Review	2 (City and RxR)
- 100% Review	2 (City and RxR)

A total of 6 meetings are proposed.

#### **Task 1.02 Data Gathering**

The majority of the data gathering effort has been completed with previous items of work. This task would include additional items needed for detailed design.

Additional topographic survey information needed for detailed design will be gathered for the KHB, Franklin run-around and the Lodi interchange yard.



**Task 1.03 Utility Coordination**

MTCO will coordinate with utility companies and City utilities for the relocation of conflicting utilities within the project area. The proposed process for coordination will be as follows:

- Utility "A" Plans: MTCO mailed "A" letters to the utility companies in previous phase of work.
- MTCO will enter utility information into AutoCAD 2000 to be shown as background information on the project plans. Additional information used for developing utility mapping will include site visits, surveyed information, USA markings and as-builts.
- Utility Pothole Plans: To expedite the utility relocations, at locations where there is a change in railroad alignment, MTCO will coordinate with a private pothole company to perform vacuum excavation to determine the vertical and horizontal location of critical utilities. It is anticipated that no more than 20 potholes will be required. General Order 128 requires a minimum clearance from the top of rail to these utilities. MTCO will coordinate with the private utility companies for relocation and or protection of utilities at these locations.
- Utility "B" Plans: MTCO will send plans to the utility companies showing the proposed improvements and the existing utilities. The "B" plans will show conflicts for the utility companies to begin relocation design.
- Utility "C" Plans: After the utility companies have sent their utility relocation plans to MTCO, MTCO will show the proposed relocations on the project plans and on the "C" plans for utility company verification.
- Utility "Notification": MTCO will notify the utility companies that they must relocate their facilities prior to construction.

**Task 1.04 Photographic Mapping**

Radman Aerial Surveys (RAS) will prepare photographic mapping for the project. The photographic mapping will show background information such as buildings, existing tracks, above ground utilities, pavement stripes, spot elevations and contours at one-foot intervals. MTCO will set and tie control prior to RAS photographing the project.

The limits of the planimetric mapping will be as follows:

<b>Location</b>	<b>Limits of Mapping</b>
UPRR interchange yard	25 feet outside of the existing right of way (180' wide), including area need for connection modifications.
Kentucky House Branch (West of Cherokee Lane)	20 feet north of Lockeford Street r/w and 20 feet south of Railroad Avenue r/w, west of Cherokee Lane (width varies).
Kentucky House Branch (East of Cherokee Lane)	20 feet outside of the existing r/w (100' wide).
Franklin Run-Around	20 feet outside of the existing r/w (100' wide), including a 200' wide strip centered on the new connection.
Lodi Avenue (East of Route 99)	20 feet outside of the existing r/w (140' Wide).

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**EXHIBIT B**

The mapping needed for the Lodi Avenue improvements is included in other phases of work.

**Task 1.05 Alternatives Analysis**

MTCO will develop three alternatives for construction of the mainline interchange yard. The alignment of the tracks will be the same for each alternative. The alternatives would evaluate drainage and right of way impacts. Retaining wall and fence locations will be presented in hand drawn cross sections presented at 100 foot intervals.

**Task 1.06 Drainage Memorandum**

MTCO will evaluate the existing drainage within the mainline interchange yard and determine the impacts the proposed design may have on the existing drainage system. It is assumed that the proposed improvements would not increase the drainage in the project area. The memorandum would evaluate drainage alternatives (up to 3 alternatives) and recommend an alternative for implementation.

It is assumed that the drainage modifications would be minor (i.e. primary connection to/extension of existing systems) and would not require detailed analysis.

**Task 1.07 Geotechnical Investigation**

BCI will provide geotechnical recommendations for the project. The tasks will include:

*Preliminary Work*

- Meet with MTCO to discuss the project.
- Visit the site to observe current conditions, drill rig access and need for traffic control.
- Develop geotechnical scope of services.

*Prepare for Subsurface Exploration*

- Mark the site for Underground Services Alert (USA).
- Coordinate with City of Lodi. We assume that we will need to submit an encroachment permit, but that the fees will be waived.
- Coordinate our subsurface investigation with UP and CCT.
- Schedule drill rig and backhoe.

*Subsurface Exploration*

- UP switchyard: 5 borings 5 to 15 feet deep and 3 backhoe test pits 6 to 10 feet deep. The test pits will be used to determine the condition of the soil overlying and around the existing storm drain pipe. We assume that the City of Lodi will perform a video assessment of the condition of the pipe interior.

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***EXHIBIT B***

- Rehabilitation of Kentucky House Branch and new connector railroad lines northwest of Lockford and North Main Streets (leading up to switch yard) and east of Guild Avenue (Franklin Run-Around): 10 borings 5 to 10 feet deep.
- Lodi Avenue interchange: 3 borings 5 to 10 feet deep.

The exploratory borings will be advanced with a truck-mounted drill rig using 4 to 8-inch diameter augers. Test pits will be excavated with a backhoe. A BCI engineer or geologist will log the borings and test pits and direct the sampling. Relatively undisturbed and bulk samples will be obtained and delivered to BCI's laboratory for testing.

*Laboratory Testing*

- Moisture/density for soil characterization, bearing capacity and settlement analysis.
- Sieve analysis for soil characterization.
- Plasticity index for soil characterization.
- Direct shear for bearing capacity analysis (embankment and railroad lines).
- Unconfined compression for bearing capacity analysis (embankment and railroad lines).

*Engineering Analysis*

BCI will perform engineering analysis and calculations to determine geotechnical recommendations for the items listed above in Project Description.

*Prepare Report*

BCI will prepare a Geotechnical Report for the project, which will include the following:

- Project description and location.
- Subsurface soil and ground water conditions.
- Laboratory test results.
- Recommendations for the railroad switchyard, rail rehabilitation and connector lines including grading, embankment settlement, retaining wall soil parameters, subgrade conditions, soil bearing capacity, subgrade modulus, and impacts of improvements on existing structures. We will provide soil strength parameters, and Mr. Rodolf will provide the actual railroad design recommendations.
- Limitations.
- Appendix including Vicinity Map, Site Plan with boring locations, Boring and Test/Pit Logs and Laboratory test results.

**Task 1.08      Vibration Monitoring**

The Acoustics & Vibration Group (TAVG) will perform the study as a subconsultant to BCI.

TAVG will:

- Perform a field vibration study to determine current train-generated vibration levels near the existing tracks and at the existing buildings.
- Observe the condition, construction type and use of the existing nearby buildings.
- Obtain data regarding the type of train traffic expected at the new switchyard.
- Perform analyses to determine the vibration levels and potential impacts to the existing buildings resulting from train vibrations generated at the new switchyard.
- Attend one design team meeting in Sacramento and one in Lodi.
- Prepare a report containing their findings and conclusions regarding vibration impacts generated from the new switchyard, including potential mitigation measures to reduce the impacts if necessary.

**Task 1.09      Retaining Wall Design**

MTCO will design the retaining wall for the mainline interchange yard. MTCO will design the retaining wall based on UP criteria. For a mechanically stabilized earth (MSE) wall option, MTCO will coordinate with MSE Wall manufacturers to design the wall. The calculations will be independently checked in our San Jose office and provided to the City for their records.

**Task 1.10      Railroad Design**

CRA will design the railroad improvements based on current UPRR, BNSF and CCT standards. CRA will attend a scoping meeting, design the railroad alignments, design the railroad profiles, add construction notes, supervise drafting and review plans. The design will be marked-up and sent to MTCO to enter the information into AutoCAD 2000.

**Task 1.11      Right of Way Documents**

MTCO will prepare documents for necessary right of way acquisition (up to 2 parcels). The documents will include plats, descriptions and deed forms. It is anticipated that all work can be performed within the proposed and existing right of way; therefore, no temporary construction easements are proposed with this scope.

MTCO will order the Title Reports for the two properties.

**Task 1.12 Right of Way Acquisition**

Universal Field Services will acquire right of way (up to 2 parcels) for the City. The acquisitions will include sending notifications of appraisals, meeting with the property owner, appraising the property and negotiating costs. Condemnation services are not included in this scope, but can be negotiated if necessary.

**Task 2.00 Plans, Specifications and Estimates**

The plan package will be developed to UPRR and CCT standards. The plans will be in imperial units and will be submitted for review at 60%, 90% and 100% stages. The plan packages will be prepared using AutoCAD 2000 and Land Development Desktop 2 (LDD2), the special provisions will be prepared using Microsoft Word 2000 and the construction cost estimates will be prepared using Microsoft Excel 2000. All plan packages will be 22" x 34" full-sized mylars and 11" x 17" half-sized "camera ready" bond. The plan packages will include the following sheets:

<i>Description</i>	<i>Scale</i>	<i># sheets</i>
Title Sheet	1"=500'	1
Typical Cross Sections	1"=5'	1
Key Map	1"=400'	1
Layout Sheets	1"=50'	13
Construction Details	varies	5
Retaining Wall Plans	varies	5
Signal Plans (Base Maps Only)	1"=20'	5
General Cross Sections <ul style="list-style-type: none"> <li>- Mainline Interchange Yard (100' OC)</li> <li>- Kentucky House Branch (500' OC)</li> <li>- Franklin Run-around (500' OC)</li> <li>- Lodi Interchange Yard (500' OC)</li> </ul>	1"=10' Horiz 1"=5' Vert	5
<b>Totals</b>		<b>36</b>

**Task 2.01 Title Sheet**

The title sheet will include location, vicinity and limits of the project. The title sheet will also include a table with utility contact information.

**Task 2.02 Typical Cross Sections**

The typical cross section sheet will include typical railroad cross sections at 1"=5' scale showing the width of sub ballast, ballast, right of way and location of key elements.

**Task 2.03 Key Map and Line Index Sheet**

The Key Map and line index will show sheet orientation. This is particularly useful for linear project packages.

**Task 2.04      Layout Sheets**

Railroad layout sheets will be plan and profile at a scale of 1"=50'. The plan view will include railroad alignments, utilities, drainage improvements, right of way, planimetric (background) mapping, and limits of construction. The profile will show the railroad track profile grades, utility crossings and drainage profiles.

The railroad design will be prepared by CRA and entered into AutoCAD 2000 by MTCO.

**Task 2.05      Construction Details**

Construction detail sheets will be developed at various scales. The detail sheets for at grade crossings will be shown at 1"=20' scale. The grade crossing details will show conform locations, curb grades, curb ramp locations, grading details, pavement delineation and signing. The detail sheets will also show details that are not included in the City Standard Plans including: special driveway details, curb ramp details, drainage details, etc.

**Task 2.06      Stage Construction and Traffic Handling Plans**

No stage construction or traffic handling plans are proposed with this project. The special provisions will direct the contractor to use the W.A.T.C.H. Manual.

**Task 2.07      Retaining Wall Plans**

MTCO will develop retaining wall plans for the proposed retaining wall. It is anticipated that the proposed wall will be a Mechanically Stabilized Earth (MSE) wall. The retaining wall plan package will include:

General Plan – The general plan will show the proposed layout, profile and typical cross section of the wall.

Foundation Plan – The foundation plan will show the geofabric layout and any special foundations required for the MSE wall.

Miscellaneous Details – The detail sheets will show details for the construction of barriers, connections, railings, fence pockets, drainage connections.

It is anticipated that no Log of Test Borings will be required with this project.

**Task 2.08      Signal Base Plans (At UP Grade Crossings)**

It is assumed that the at-grade railroad crossing designs will be completed by Union Pacific. This work is not included in our scope or fee estimate.

MTCO will prepare the AutoCAD 2000 base maps showing the background mapping and utilities. These base maps will be supplemented by FPA who will add existing signal equipment, based on as-builts and field investigations. FPA will note potential conflicts created by overhead/underground utilities, drainage facilities, etc.

1"=20' scale base maps will be provided to UPRR for the design of the at-grade crossings along the KHB at the following locations:

- Main Street (new crossing gates)
- Stockton Street
- Washington Street
- Pedestrian Crossing at Calaveras Street
- Cherokee Lane
- Cluff Avenue
- Guild Avenue

**Task 2.09 Signal Plans Stockton Street/Lockeford Street**

FPA will prepare signal and lighting plans for the intersection of Lockeford Street and Stockton Street.

The plans will include information on controller, vehicle detection, vehicle and pedestrian signals, emergency vehicle preemption, conductor and equipment schedules.

FPA will meet with the City up to two times during the design/review process to clarify issues, resolve problems and discuss agency comments.

**Task 2.10 General Cross Sections**

MTCO will prepare cross sections at the intervals and scales specified in the table above. The cross sections will show the existing right of way, existing ground, approximate location of known existing utilities and the proposed track location.

**Task 2.11 Special Provisions**

MTCO, CRA and FPA will prepare special provisions and the Bid Proposal to CCT's standard format. It is anticipated that the CCT will provide electronic files of their standard general and special provisions for our use.

**Task 2.12 Construction Cost Estimate**

MTCO, CRA and FPA will prepare a construction cost estimate for the project. The estimated quantity will be developed from scalable plans and CADD drawings. The unit costs will be developed based on similar current projects. The cost estimates will be submitted for review by the project team.

**Task 3.0 Construction Support****Task 3.01 Assistance During Bidding**

MTCO team will provide assistance during the bidding process. Assistance shall include providing clarification or answers to questions received from prospective bidders. This assistance could include necessary design revisions if deemed necessary. The City will send out coordinated responses to all questions during the bidding period.

**Task 3.02 Construction Design Support**

MTCO team will provide assistance during the construction process. Assistance shall include providing clarification or answers to questions on the plans and specifications.

**Project Schedule**

Task	Completion Date*	Comments
<b>Task 1.00 Studies and Background Mapping</b>		
Task 1.01 Project Meetings	n/a	On-going
Task 1.02 Data Gathering	11/15/2002	
Task 1.03 Utility Coordination	4/11/2003	
Task 1.04 Planimetric Mapping	11/15/2002	
Task 1.05 Alternatives Analysis	11/1/2002	
Task 1.06 Drainage Memorandum	12/1/2002	
Task 1.07 Geotechnical Investigation	12/1/2002	
Task 1.08 Vibration Monitoring	12/1/2002	
Task 1.09 Retaining Wall Design	12/1/2002	
Task 1.10 Railroad Design	12/1/2002	
Task 1.11 Right of Way Documents	1/15/2003	
Task 1.12 Right of Way Acquisition	4/11/2003	
<b>Task 2.00 Plans, Specifications and Estimates</b>		
60% Submittal	12/13/2002	
60% Review	1/17/2003	
90% Submittal	2/14/2003	
90% Review	3/14/2003	
100% Submittal	4/11/2003	
Advertise (CCT)	5/1/2003	Per RR Schedule
Open Bids (CCT)	6/1/2003	Per RR Schedule

\* Assumes a Notice to Proceed (NTP) date of by October 1, 2002.



RESOLUTION NO. 2002-193

A RESOLUTION OF THE LODI CITY COUNCIL AUTHORIZING  
THE CITY MANAGER TO EXECUTE A MEMORANDUM OF  
UNDERSTANDING BETWEEN THE CITY OF LODI AND VARIOUS  
RAILROADS TO CONSTRUCT TRACK IMPROVEMENTS  
ALLOWING ABANDONMENT OF THE EXISTING  
LODI AVENUE RAILROAD TRACKS

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NOW, THEREFORE, BE IT RESOLVED, that the Lodi City Council does hereby authorize the City Manager to execute a Memorandum of Understanding between the City of Lodi and Union Pacific Railroad Company, Burlington Northern and Santa Fe Railway Company, and Central California Traction Company to construct railroad track improvements to facilitate the abandonment of the existing Lodi Avenue railroad tracks as part of the Lodi Central City Railroad Safety Improvement Project.

Dated: September 18, 2002

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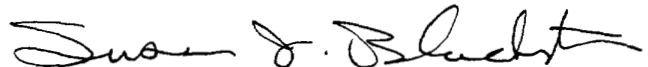
I hereby certify that Resolution No. 2002-193 was passed and adopted by the Lodi City Council in a regular meeting held September 18, 2002 by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Howard, Land, Nakanishi, and  
Mayor Pennino

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None



SUSAN J. BLACKSTON  
City Clerk

RESOLUTION NO. 2002-194

A RESOLUTION OF THE LODI CITY COUNCIL AUTHORIZING THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH MARK THOMAS & COMPANY, INC., FOR FINAL DESIGN SERVICES ASSOCIATED WITH THE LODI AVENUE RAILROAD TRACK REMOVAL, FURTHER AUTHORIZING THE CITY MANAGER TO EXECUTE MEASURE K COOPERATIVE DESIGN AND CONSTRUCTION AGREEMENTS FOR THE PROJECT, AND FURTHER APPROPRIATING FUNDS FOR THE PROJECT

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NOW, THEREFORE, BE IT RESOLVED, that the Lodi City Council does hereby authorize the City Manager to execute a professional services agreement with Mark Thomas & Company, Inc., for final design services associated with the removal of the Lodi Avenue Railroad Track; and

BE IT FURTHER RESOLVED that the City Manager is hereby authorized to execute Measure K Cooperative Design and Construction Agreements for this project; and

FURTHER RESOLVED, that funds be appropriated as follows:

Measure K Grant Funds	\$6,520,000 (\$180,000 previously committed)
Street Fund	<u>\$ 755,000</u>
Total Appropriation	\$7,275,000

Dated: September 18, 2002

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I hereby certify that Resolution No. 2002-194 was passed and adopted by the Lodi City Council in a regular meeting held September 18, 2002 by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Howard, Land, Nakanishi, and Mayor Pennino

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None



SUSAN J. BLACKSTON  
City Clerk